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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,777	12/27/2001	Sung Uk Park	K-0380	9764
34610	7590	10/17/2005	EXAMINER	
FLESHNER & KIM, LLP			ELALLAM, AHMED	
P.O. BOX 221200			ART UNIT	PAPER NUMBER
CHANTILLY, VA 20153			2668	

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/026,777	PARK, SUNG UK
	Examiner AHMED ELALLAM	Art Unit 2668

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 27 December 2001.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-21 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 27 December 2001 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.



HANH NGUYEN  
PRIMARY EXAMINER

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

## DETAILED ACTION

### ***Specification***

1. The disclosure is objected to because of the following informalities:

In paragraph [0001], the numeral character “2001” should be “2000”.

In paragraph [0038], line 3, the numeral character “6” should be “16”.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, it is not clear what is meant by the recited “checking whether said destination address belongs to said routing device” and “checking whether said destination address is identical to said recent address if said destination address does not belong to said routing device”. More specifically, it is not clear what is meant by “belonging” and “not belonging” of a destination address to the routing device. In addition, packets are being transmitted from the routing device regardless if their destination addresses belong to the routing device or not as indicated by dependent claims 2 and 6, and that casts a doubt to what is the meaning of the word belonging.

Claim 14 has the same scope of claim 1, thus it suffers from similar deficiencies as claim 1.

Claims 2-13, 15-21 depends from respective independent claims 1 and 14, thus they are subject to the same rejection.

Hereinafter the belonging and not belonging of the destination address to the routing device is being interpreted by the Examiner to mean whether or not the address of routing device is the same as the destination of the packet.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4-7, 14, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kametani et al, US 6,839,346 in view admitted prior art, specification paragraphs [0003]-[0006] and figure 1. Hereinafter referred to as Kametani and APA respectively.

Regarding claim 1, with reference to figure 2-4, Kametani discloses a method for routing a packet in a switching apparatus (figure 2) (claimed routing device) having a microprocessor 11 (claimed main processor), a packet memory (claimed main cache table), IP flow table (claimed instant cache table), the IP flow table for storing IP source address and IP destination address, and corresponding output port (see figure 3)

(claimed instant cache table storing a recent address (IP address as in claim 14) and a recent interface (IP interface as in claim 14) associated with the most recent packet transmission process made by the routing device) (Examiner interpreted the port as being the claimed interface), the method comprising:

Receiving an IP packet, the IP packet includes its destination address, see column 8, lines 64-69, column 9, lines 1-2, and figure 4, step 301. (Claimed receiving a packet (IP packet as in claim 14) that includes its destination address),

Searching the IP flow table for determining if a search key is registered, see column 9, lines 29-42. (Claimed checking whether the destination address (destination IP address as in claim 14) is identical to recent address),

Transmitting the packet to the corresponding port if the search key is registered, see figure 4, steps 306-309 and column 9, lines 29-52. (Claimed transmitting the packet to the recent interface (IP interface as in claim14) if the destination address (destination IP address as in claim 14) is identical to the recent address (IP address as in claim 14)).

The difference between Kametani and claims 1 and 14 is that Kametani does not disclose checking if a destination address (destination IP address as in claim 14) of received packet (IP packet as in claim14) belongs to the routing apparatus.

However, APA discloses packets having destination address (destination IP address as in claim 14) belonging to the routing device. (Examiner interpreted the top application module of figure 1 for processing some packet received at the routing device as being the claimed packets having destination address belonging to the routing device, since the routing device in such instance is understood of being the destination

device). It would have been obvious to a person of skill in the art at the time the invention was made to check the received packets whether their destination addresses belong to the routing apparatus or not so that further processing can be made in case the destination address is the same as the routing apparatus (APA, Application module 3 processing) and routing the packets to respective ports if a destination address is not the same as that of the routing apparatus.

Regarding claims 4 and 17, APA figure 1 shows a protocol layer 2 for receiving IP packets from the main processor, the protocol layer being connected to a routing table 4.

Regarding claims 5 and 18, APA figure 1 shows a top application layer 3 for receiving IP packets from the protocol layer 2, see paragraph [0005]. (Claimed sending IP packet to a top application module included in the routing device).

Regarding claim 6, the APA discloses transmitting the packet to a first interface that corresponds to the destination address. See paragraph [0006].

Regarding claim 7, APA discloses the first interface correspond to the destination address is found by searching the routing table. See paragraph [0006].

#### ***Allowable Subject Matter***

4. Claims 2, 38-13, 15, 16, and 19-21would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Viswanadham et al, US 6,424,659; Hegde, US 6,570,875; Jimmei et al, US 6,614,795; Boucher et al, US 2004/0003126; Kobayashi et al, US 6,768,739; Zhang et al, US 2005/0089016; Kadambi et al, US 2005/0047411.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AHMED ELALLAM whose telephone number is (571) 272-3097. The examiner can normally be reached on 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AHMED ELALLAM  
Examiner  
Art Unit 2668  
Friday, October 14, 2005



HANH NGUYEN  
PRIMARY EXAMINER